Before the Federal Communications Commission Washington, D.C. 20554

In the matter of

WC Docket No. 02-361

Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges

REPLY COMMENTS BY STATE MEMBERS OF FEDERAL-STATE JOINT BOARD ON SEPARATIONS

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I. **INTRODUCTION**

Α. **Summary of Comments**

These comments are filed by the three current state members of the Federal-State Joint Board on Separations created under 47 U.S.C. § 410(c). We believe that if the Commission determines a service is interstate and subject to its jurisdiction, then it also must be responsible for that service's tariffing, revenue accounting, and recovery of costs. Since the alignment of jurisdictional responsibility with cost assignment may be difficult if not impossible using old traffic measurement methods, the Joint Board and Commission should begin immediately to develop a new method to allocate costs between jurisdictions to take effect at the conclusion of the current freeze, regardless of the outcome of this particular proceeding.

B. The Petition

On October 18, 2002, AT&T Corp. (AT&T) filed a Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges (Petition). On November 18, 2002, the Commission requested comment on that petition (DA 02-3184). AT&T states that it currently provides services using Internet protocol (IP) transmission. These include both phone-to-phone enhanced voice prepaid card services and phone-to-phone telephony services (VoIP). AT&T explains that, in contrast to calls transmitted over private interexchange networks that use Internet protocol, AT&T's services are transmitted over the same "common" Internet backbone facilities that carry Internet service provider (ISP) and all other types of public Internet traffic.²

¹ AT&T Petition at 24.

² *Id*.

According to AT&T, incumbent local exchange carriers (ILECs) are asserting that business lines and other local facilities are available only for "computer-to-phone" and "computer-to-computer" telephony services. The ILECs are, AT&T reports, engaging in various forms of "self-help" involving the imposition of access charges on AT&T's phone-to-phone IP telephony services.³ This includes requiring VoIP providers to pay terminating access charges. In addition, the state commission in New York has ordered that all intrastate VoIP calls be subject to originating access payments as well.⁴

AT&T asks that the Commission issue a declaratory ruling ("VoIP Rule") that providers of VoIP services carried over the Internet are entitled to subscribe to local services and are exempt from interstate access charges unless and until the Commission adopts regulations that prospectively provide otherwise.⁵ All forms of origination and termination that involve access charges are apparently included in the scope of AT&T's request, including:

- 1) Computer-to-computer calls in which the originating customer uses his or her computer to place the data stream into IP format. Typically these calls begin with a switched call from the originating user to an ISP over a modem. The terminating customer also places a switched call to an ISP and uses a computer to convert the data from IP format back to voice.
- 2) Gateway phone-to-phone calls.⁶ These are "phone-to-phone" calls in which each user "sen[ds] and receive[s] in voice (TDM) protocol, and effect no net change in format." Typically these calls begin with a switched call from the originating end user to an Internet "gateway" service, which is an ISP that offers voice-to-IP conversion. At the terminating end there is again a switched call, but this time from

³ *Id.* at 23.

⁴ *Id.* at 22.

⁵ *Id.* at 26.

⁶ AT&T Petition at 10.

the gateway to the end user's phone using a NANP telephone number. These calls are similar to computer-to-computer calls, except that the Internet facility provides not only the usual "ISP" function but also provides a phone-to-IP conversion that qualifies it as a "gateway," and the terminating user receives rather than initiates the final switched call.

- 3) "1-plus" phone-to-phone calls. The originating customer simply dials "1" and the telephone number to be reached.⁸ The user's presubscribed interexchange carrier then can transport the call and must find some way to terminate the call using facilities that convert the data stream from IP back to voice.⁹
- 4) Various combinations of the above, including "phone-to-computer" calls and "computer-to-phone" calls.

Item 3) above is particularly broad, and apparently would extend to any direct dialed toll call that an interexchange carrier chooses to convert to IP format, even where the originating customer has not made an IP conversion or even explicitly dialed an ISP or gateway service.

The IXC apparently would have effective control over the call and could put any toll call under the umbrella of a new VOIP rule simply by converting part of the transmission path to IP format. AT&T reports that it currently uses this method only for a "small fraction of its voice traffic."

We anticipate that if the petition is granted, this small fraction will increase as carriers convert a substantial portion of their calls to IP format to take advantage of the access charge exemption.

The petition apparently arose from disputed interstate access charges. Accordingly, AT&T's requests exemption from interstate access charges applied to interstate VoIP traffic that originates in one state and terminates in another state, when defined on a VoIP "end-to-end"

⁷ *Id.* at 11.

⁸ *Id.* at 11. These calls use "feature group D."

⁹ AT&T has installed limited gateway facilities to put VoIP over its own networks. *Id.* at 18.

¹⁰ *Id.* at 23.

basis. Although the petition is not clear, AT&T also apparently seeks similar relief with respect to two kinds of intrastate access charges. The first is relief from access charges involving intrastate access paid when a customer contacts a local or in-state ISP Gateway for purposes of placing a longer VoIP call that originates and terminates in different states. Even less clear, but apparently still requested, is relief from intrastate access charges involving all VoIP related calls that originate and terminate within a single state.

The petition does not describe the jurisdictional basis on which the Commission might direct the states not to apply intrastate access charges. The Commission has no obvious statutory basis for jurisdiction over switched toll calls that originate and terminate in the same state.¹³

For "1-plus" dialed calls, AT&T apparently asks the Commission to rule that a "1-plus" call that originates and terminates in the same state should not be subject to intrastate access charges. It is possible that the Commission may claim jurisdiction over such calls by declaring them to be information services. If so, this would be a significant departure from existing policy and may have significant separations implications. We assume that if the Commission were to grant the petition as to "1-plus" calls, it would do so under this information services rationale. ¹⁴

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¹¹ "The applicability of access charges to phone-to-phone and other forms of IP telephony now presents a controversy that requires resolution by the Commission." *Id.* at 23. "[A]bove-cost and inefficient access charges cannot be applied to phone-to-phone telephony services that are transmitted over the Internet itself." *Id.* at 24. "[F]ew things would be potentially more destructive of the development of the Internet than would a rule that prohibited Internet services from using local services to reach end users and that required that they pay the access charges" *Id.* at 25.

¹² "[B]y issuing the requested ruling, the Commission will also be providing leadership and guidance to states, who recognize that uniform rules should govern the applicability of above-cost access charges (*be they interstate or intrastate*) to VOIP telephony and who have endeavored to follow the federal rule in determining the applicability of intrastate access charges to Internet and other such traffic." *Id.* at 23 (italics added).

¹³ 47 U.S.C. § 153(22).

¹⁴ The State Members of the Separations Joint Board do not comment here on this jurisdictional theory. The opinions expressed here are limited solely to the effect of a VoIP Rule on separations.

The jurisdictional basis for Commission action is equally unclear when customers initiate an IP call by making toll intrastate calls to contact their ISP or an IP voice gateway. Such a customer-initiated VoIP call has a complex structure when viewed from the traditional regulatory perspective defined by the switched network. Consider a "phone-to-phone" VoIP call initiated and terminated on switched lines through IP gateways. The entire VoIP call consists of three components:

- 1) a switched "call" between the originating end user and the originating IP gateway;
- 2) transmission (invisible to the switched network) through the Internet; and
- 3) a switched connection between the terminating IP gateway and the terminating end user, using that end user's assigned NANP telephone number.

Assuming that parts 1) and 3) of such a gateway IP call are intrastate switched connections, if the Commission were to grant AT&T's petition for such gateway calls, one possibility would be for the Commission to assert jurisdiction over all three components on an "end-to-end" basis. Under an end-to-end analysis, if the terminating IP user and the originating IP user are in different states, all component communications, including intrastate local and toll calls to and from gateways, would be interstate. We assume that if the Commission were to grant the petition as to gateway calls, it would do so under this broad "end-to-end" rationale. 16

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¹⁵ This theory was previously adopted by the Commission when it allowed the filing of federal tariffs for DSL service. *See, In re GTE Telephone Operating Cos., GTOC Tariff No. 1*, CC Docket No. 98-79, Memorandum Opinion and Order, rel. Oct. 30, 1998, FCC 98-292, ¶ 19.

¹⁶ Once again, the State Members of the Separations Joint Board do not comment here on this jurisdictional theory. The opinions expressed here are limited solely to the effect of a VoIP Rule on separations.

C. The Freeze

In 2001 the Commission established a "freeze" on separations factors. From July 1, 2001, through June 30, 2006, separations factors are frozen for all carriers.¹⁷ In addition, for large "price-cap" carriers, categories¹⁸ as well as expense factors¹⁹ are frozen. Unless it is extended, the freeze will end on June 30, 2006. If nothing is done before that time, pre-freeze separations rules will be revived.

II. JURISDICTION AND COSTS

The state members of the Separations Joint Board do not believe that the existing separations rules and procedures, requiring the measurement of switched usage, should be revived in 2006.²⁰ Nevertheless, the current underlying purpose of separations, even as frozen, is to achieve a reasonable relationship between the Commission's and the states' jurisdiction over services, and the costs and revenues associated with those services.

In *Smith v. Illinois Bell* the Supreme Court held in 1930 that the separations method chosen may not "ignore altogether the actual uses to which the property is put." ²¹ Although *Smith* is dated, it still has vitality. ²² In the present proceeding, the Commission cannot "ignore altogether" how a change in jurisdictional assignment will affect the separation of the costs and revenues of operating the switched network.

¹⁷ See, e.g., 47 C.F.R. § 36.3(a).

¹⁸ See, e.g., 47 C.F.R. §§ 36.3(b), 36.152(d) (average balance of categories and subcategories for cable and wire facilities).

¹⁹ See, e.g., 47 C.F.R. § 36.

²⁰ Indeed, some believe that it is time to reexamine the existing dichotomy of jurisdiction between intrastate services and interstate services.

²¹ Smith v. Illinois Bell Telephone, 282 U.S. 133, 150-51 (1930).

It appears that if the Commission granted AT&T's petition, it would do so under its residual regulatory authority under Title II over "interstate [and] foreign communications by wire or radio" under 47 U.S.C. §§ 152(a), 201-203. If the Commission declares a service to be an interstate service and subject to this residual federal regulation, then it should, under *Smith*, also direct carriers to file tariffs for that service, direct carriers to record revenues from that service as interstate, and, in consultation with this Joint Board, make appropriate adjustments to the separation of costs.²³

The state Joint Board Commissioners recognize that there are certain narrow exceptions to this rule, in particular where Congress has assigned specific authority to the Commission over services where the costs and revenues are assigned to the intrastate jurisdiction. For example, the Commission has authority to adopt rules about wholesale prices under sections 251 and 252 for services that remain jurisdictionally intrastate. But nothing in the Telecommunications Act of 1996 broadly repealed the principles established by *Smith* or the fact that those principles apply when the Commission exercises its basic regulatory authority under 47 U.S.C. §§ 152(a) and 201-203.

Significantly, the Commission has previously directed local exchange carriers to provide ISP services through intrastate tariffs. For example, in *SBC v. FCC*, the Eighth Circuit held that this arrangement did not impermissibly require state regulators to set rates for the recovery of interstate costs.²⁴ However, the court in that case said that the states were "free to assess intrastate tariffs as they [saw] fit" and that it was unable to conclude that the FCC had "directed

²² See, Crockett Tel. Co. v. FCC, 963 F.2d 1564, 1569 (D.C.Cir. 1992) ("the Congress that enacted the Communications Act was regulating in response to *Smith*, and no intervening Congress has seen fit to depart from the decision that some form of separation is to remain, whether or not constitutionally required.")

²³ 47 U.S.C. § 203, 410(c).

the States to inflate intrastate tariffs to cover otherwise unrecoverable interstate costs, thereby exceeding its statutory authority."²⁵

The Commission has broad discretion over the degree of accuracy required in the separations process, and "extreme nicety"²⁶ is not required in determining the portion of network costs that are allocated to the intrastate jurisdiction. Indeed, the alignment has never been perfect, ²⁷ and in recent years it has become less precise. The state members of the Separations Joint Board recognize the impossibility and impracticality of seeking an exact match between costs, revenues and jurisdiction. Indeed, in part to emphasize our lack of interest in false precision, we have supported the creation of the freeze that is now in effect.

Regulatory comity, if not jurisdictional principles, still require at least a rough alignment among the services over which the Commission exercises its residual authority, the revenues received from those services, and the costs that are separated to the interstate jurisdiction. If the Commission wants to control rate design, it should also deal with costs. This principle constrains federal intrusions into intrastate ratemaking.

²⁴ Southwestern Bell Tel. Co. v. FCC, 153 F.3d 523, 541-42 (8th Cir. 1998) ("SBC"), petition for rehearing denied, 2000 U.S. App. LEXIS 16086 (June 7, 2000).

²⁵ *Id.* at 543.

²⁶ Smith, supra. at 150-51.

²⁷ See, In the Matter of Applications for Review of the Common Carrier Bureau's Letter of Interpretation Regarding the Clarification of the Role of Direct Assignment in the Jurisdictional Separations Process, Memorandum Opinion and Order, 8 FCC Rcd 1558, 1560-61 at ¶ 10 (1993) (concluding that Smith does not require an exact apportionment of interstate and intrastate usages of property, but only a reasonable apportionment; further, separations procedures "provide a balance between the need to reasonably reflect cost causation principles and the goal of simplification").

III. SEPARATIONS AND RATE EFFECTS OF GRANTING THE PETITION.

A. Granting the Petition Will Not Change Cost Separation Factors Before 2006.

Granting AT&T's petition will allow interexchange carriers to convert traffic currently identified as toll to local intrastate usage. If cost separations were currently based on usage measurements, the AT&T petition could certainly affect separations. Because of the freeze, however, usage changes have no immediate effect on jurisdictional separation of carrier costs. This is true when usage changes due to changing customer patterns and also when, as here, usage changes due to new regulatory policies that change carrier behavior. In both cases cost separations are unaffected because, until July 1, 2006, separations factors will be defined by usage data from 2000.²⁸ Therefore granting AT&T's petition would have no effect on the factors used in jurisdictional cost separations factors until July of 2006.

B. Granting the Petition May Increase Intrastate Costs Before 2006.

Granting the petition could have a direct effect on intrastate rates. If toll access services can be provided through local exchange tariffs, local usage and total usage may both increase. If usage increases to the point where additional investment is required, state jurisdictions might be faced with carrier requests to increase intrastate rates to offset the additional costs.²⁹

C. Granting the Petition Will Reduce Intrastate Revenue Before 2006.

Approval of AT&T's petition will reduce the intrastate revenues of local exchange carriers. The overall magnitude of the shifts will depend upon factors beyond our current

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²⁸ Some factors are not frozen, such as special access lines, but these should not be affected by the present petition.

²⁹ This issue may have less importance for states using price cap regulation.

knowledge,³⁰ but there may be substantial rate effects in some states, even before the separations freeze ends.

Consider an intrastate "1-plus" phone-to-phone toll call. Currently, the costs of the originating and terminating local exchange carriers are assigned to the proper jurisdiction. If the IXC uses traditional trunks to transport the customer's "1-plus" call, the call will still be routinely recorded as an intrastate call, and access charges will be paid.

If AT&T's petition is granted, and if the IXC chooses to transmit the intrastate toll call using IP format, the call would be under the commission's interstate jurisdiction. Separations practice would ideally require both costs and revenues to be assigned to interstate, but neither would be so assigned. This avoids creating a practical problem, from the Commission's perspective, because the errors are largely offsetting, and there is no interstate cost-revenue mismatch.

From the state's perspective, however, there could be a practical problem. Under the proposed VoIP Rule, toll access would be replaced by local usage. A local exchange carrier originating or terminating a VoIP call will no longer receive intrastate access revenues, and this could reduce intrastate carrier revenues significantly. As a result, states may need to revise their intrastate rate schedules to replace the lost revenues.

Higher local rates could result. Some states seek to balance rates and costs between local and toll traffic. These states would seek to eliminate any cost-revenue mismatches between intrastate toll access and the local services associated with IP based calling. To adjust for this mismatch, states would need to increase local rates. Moreover, intrastate toll traffic eligible for

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³⁰ One major factor will be whether the petition causes customers to migrate from computer-to-computer and gateway phone-to-phone calls to "1-plus" phone-to-phone calls.

the VoIP access exemption would likely increase over time, This will make it even more difficult for states to accomplish and maintain balanced rates.

Other kinds of VoIP calls could also produce the same effect on intrastate access revenues.³¹ Consider a computer-to-computer VoIP call or a gateway phone-to-phone VoIP call, the first leg of the call may be an intrastate toll call. Assume also that the ISP or gateway at the terminating end reaches the terminating end user with an intrastate toll call. Granting AT&T's petition would eliminate the intrastate access revenues of both carriers, but it would make no matching reduction in intrastate costs, thus forcing many states to raise other intrastate rates without any increase in intrastate service levels.³²

We conclude that, if approved, the AT&T petition has the potential to create a costrevenue mismatch at the state level. This conclusion applies to all varieties of VoIP call that use intrastate access. The result is pressure to increase intrastate local rates.

IV. IF THE COMMISSION APPROVES AT&T'S PETITION, IT SHOULD ACCELERATE PLANNING FOR THE END OF THE SEPARATIONS FREEZE.

A. It May Not Be Possible To Design Usage-Based Separations Rules for VoIP.

If the VoIP Rule is adopted, it may be impossible for carriers to collect the data that would be needed for a post-freeze usage-based separations system. In a computer-to-computer call initiated by a switched local call, for example, the VoIP call appears to the switched network as a normal analog signal. To assign the traffic, the originating carrier must somehow differentiate between a modulated digital signal and a traditional modulated voice signal.

³¹ We presume here that the Commission will not take any action prohibiting states from imposing local measured service charges at retail, or reciprocal compensation charges at wholesale, for traffic they classify as local.

³² There may be additional implications for some states that apply unfrozen separations procedures to intrastate residual costs.

Second, the carrier would then have to differentiate, among modulated digital signals, between VoIP and non-VoIP data streams.

The Joint Board has investigated the practicality of making the first of these differentiations, between voice and modulated digital traffic. In 1998 and 1999, the Joint Board attempted to evaluate the proportion of local traffic that was actually Internet traffic. Carriers uniformly advised us that it was either extremely difficult or impossible to differentiate between a "plain voice" signal and a digital signal generated by a modem. Ultimately the Joint Board concluded that it is impracticable to identify with any useful degree of accuracy all IP traffic that is coded inside a modulated analog call. We have no reason to believe this has changed since 1999. Moreover, we have no evidence that the second kind of differentiation, between VoIP and non-VoIP modulated data streams, is possible under any circumstances. For these reasons, the computer-to-computer VoIP call will be difficult or impossible for carriers to differentiate under traditional separations.

In a gateway phone-to-phone call the originating local exchange carrier faces an even more difficult identification task. Here the originating traffic is simply a normal voice. The call would be subject to the VoIP Rule and interstate if and only if the gateway converts it to IP format. In other words, the jurisdictional nature of the call will depend not on anything observable about the call, but on how the gateway later processes the signal. Here the task cannot be completed by examining the form of the originator's data stream.

In summary, carriers would face great difficulties if they were forced, by separations, to measure VoIP usage. In some cases the tasks required would be at least technically difficult. In some cases the task appears to be impossible. In all cases, it would likely be pointless, because, as the state members of the Joint Board have observed, the impact on *customers* of these fine

distinctions is virtually nil in light of the rate design flexibility enjoyed by the Commission. That flexibility allows increases in interstate costs to be recovered through flat rate charges to customers that are indistinguishable, as a practical matter, from basic monthly intrastate rates.

B. The Existing Separations Rules Do Not Work For VoIP.

Even if these technical problems could somehow be overcome, the existing (pre-freeze) separations rules are based on usage and are not suitable for measuring VoIP traffic. Usage data are recorded by viewing calls solely from the perspective of the switched network. Usage data cannot differentiate, for example, between a normal voice local call to an ISP employee and the first leg of a VoIP call to California. The mismatch between an "end-to-end" jurisdictional structure and the existing switched call recording system will produce many circumstances in which the network incorrectly records the jurisdiction of a VoIP call.

If the Commission were to adopt the proposed VoIP Rule, it is likely that the separations rules now in effect would often over-record local usage and under-record interstate usage. For example, consider a gateway phone-to-phone call initiated with a local switched call to an ISP with a point of presence served by the same wire center as the originating user.³³ Although this call is an interstate VoIP call, the existing switches will record two local calls, one from the originating user to the local switch and the other from the switch to the ISP. At the terminating end of the VoIP call, another pair of switched local calls may be recorded. In the end, a single minute of an interstate VoIP call could produce as many as four spurious minutes of intrastate

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³³ AT&T does not seek relief in these cases because no access charges are imposed by local exchange companies. Yet the jurisdictional logic would seem the same. That is, if a VoIP call initiated by a switched intrastate toll call is actually interstate on the "end-to-end" theory, then a call initiated by an intrastate local call would be jurisdictionally classified as interstate for the same reasons.

usage and fail to record the actual single minute of interstate usage. This could substantially distort separations factors, in particular by overstating intrastate usage.³⁴

C. The Need For A New Separations Process

Whether or not the Commission grants the AT&T petition, the separations issues raised by that petition highlight the need to develop, prior to the expiration of the freeze, a system of assigning jurisdiction that does not depend upon increasingly arcane or impractical systems of measuring usage.³⁵

In the view of the state members of the Joint Board, we should recognize that the existing separations rules and procedures are inadequate. We should not try to adapt them to modern networks by finding new ways to measure usage, adaptations that apparently would be neither efficient nor practicable. Instead, we should be looking for a broader solution. Some possibilities, like fixed separations factors, were discussed in our recent notice involving the "Glide Path."³⁶ That paper also discussed some changes that might make separations unnecessary, although some might require legislation. The Commission should begin to address these soon.

³⁴ The magnitude of the problem will depend in part on the extent that computer-to-computer calls and gateway phone-to-phone calls comprise a substantial portion of future toll traffic.

³⁵ If the Commission grants AT&T's petition, that decision may make it more politically difficult to end the freeze in 2006, unless it is replaced by a system not based on measuring circuit switched usage. As VoIP traffic increases, the imbalance between network usage and the frozen separations factors will grow. Therefore ending the freeze, and returning to pre-freeze separations, could require transferring increasing amounts of cost from the intrastate jurisdiction to the interstate jurisdiction. Although, as we noted above, this could be done without increasing usage rates, some rates for interstate service would have to change, and the Commission might view this as a reason to avoid ending the freeze.

But granting the petition will also make the freeze more legally precarious. A freeze is normally considered a transitional measure to a new system. But any freeze becomes more difficult to justify over time as the world changes and the separations system falls farther and farther behind. Old usage data become increasingly irrelevant to current usage, and the longer the freeze stays in place the more vulnerable it becomes. The problem is exacerbated if there are also significant policy changes during the freeze period, such as by changing the jurisdiction of a substantial portion of the traffic.

³⁶ Options for Separations: A Paper Prepared by the State Members of the Separations Joint

Separations, like other relics of a simpler telecommunications past, now serves primarily to complicate and sometimes frustrate the ability of telecommunications markets to evolve in a national, market-driven (as opposed to regulation-driven) way. The AT&T petition is merely the latest example of separations issues complicating an already difficult and important issue. The Commission should, as we have discussed in these comments, ensure that it does not implement regulatory policies that will, through the operation of separations (even as frozen), unreasonably

Maine Public Service Commission

Iowa Utilities Board